REMARKS/ARGUMENTS

Claims 1-8 are pending and stand rejected. Applicants have amended Claims 1, 2, 5 and 8 to recite more distinctly and clearly that which they consider their invention. Entry and favorable reconsideration are respectfully requested.

Drawings

An amended Figure 9 is submitted herewith with an added legend showing that it depicts "Prior Art," thereby obviating its objection.

Claim Objections

Applicants respectfully submit that the objections to Claims 5 and 8 have been overcome by their amendment, shown above.

Claim Rejections

The Office Action rejected all pending claims over Drukier (U.S. Pat. No. 5,866,907), or over Drukier in view of Sato *et al.* (U.S. Pat. No. 4,347,214). Applicants respectfully traverse.

As amended, the claims recite a radioactive gas measurement apparatus that comprises a main detector which is a plate-shaped semiconductor detector, and a sub-detector which is a scintillation detector. According to the present invention, a particular radiation emitted from the radioactive gas is measured with an anticoincidence count processing using signals of the main detector and sub--detectors, therefore it realize to remove background noise accurately, and accurate identification of Xe-133 1s possible by using a plate-shaped semiconductor detector as main detector.

Drukier, in contrast, discloses that two scintillator detectors are placed opposingly, and to reduce the actual radioactive component of the background by measurement processing of software. The Office Action mentioned that Drukier

discloses a semiconductor detector in column 22, however there is no disclosure of a semiconductor detector but only scintillator. Thus, Drukier fails to teach and suggest measurement in combination of semiconductor detector and scintillation detector.

Furthermore, at the top of page 4 of the Office Action, it is stated that it would be obvious for one of ordinary skill in the art to "have included the anti-coincident processor, as it would require less time to process the raw data." However, there is no indication that such a teaching or suggestion existed in the prior art. Applicants respectfully submit that the above statement in the Office Action is nothing more than a 20-20 hindsight gathered from applicants' disclosure with the benefit of the present invention.

It is well-established that in order to establish a proper prima facie case of obviousness, the prior art must teach all elements of the claimed invention, with teachings or suggestions for combining or modifying the prior art, and that there is a reasonable likelihood of success. Significantly, the teaching or suggestion to make the claimed combination and reasonable expectation of success <u>must</u> both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488 (Fed. Cir. 1991).

Drukier does not disclose, or suggest any desirability of, a measuring circuit for removing background noise using an anti-co-incidence counter circuit such as the present invention. Thus, applicants respectfully submit that the Office Action has failed to establish a prima facie case of obviousness. Accordingly, the rejections of claims 1-4, 6 and 7 are improper and should be withdrawn. Furthermore, Sato et al. does not in any way remedy the deficiency of Drukier. Therefore, the rejection of Claims 5 and 8 over Drukier in view of Sato is also improper and should be withdrawn.

Application No. 10/084,425 Reply dated March 5, 2004 Response to Office Action dated November 6, 2003

In summary, all claims are now in condition for allowance and applicants earnestly solicit an early indication to that effect from the Examiner.

If there are any questions regarding this response or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (CAM # 056209.50957US).

Respectfully submitted,

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